



MURANG'A UNIVERSITY OF TECHNOLOGY

SCHOOL OF PURE APPLIED AND HEALTH SCIENCES

DEPARTMENT OF PHYSICAL AND BIOLOGICAL SCIENCE

UNIVERSITY ORDINARY EXAMINATION

SEPT/DEC 2021

2020/2021 ACADEMIC YEAR

THIRD YEAR ONE SEMESTER EXAMINATION FOR, BED SCIENCE

UNIT CODE: AZL 303

UNIT TITLE: LIMONOLOGY

DURATION: 2 HOURS

Instructions to candidates:

1. Answer question One and Any Other Two questions.
2. Mobile phones are not allowed in the examination room.
3. You are not allowed to write on this examination question paper.

SECTION A: ANSWER ALL QUESTIONS IN THIS SECTION

QUESTION ONE (30 MARKS)

- (a) Briefly discuss the autochthonous and allochthonous energy sources in aquatic ecosystems (5 marks)
- (b) Explain the water pathways in the hydrological cycle. (5 marks)
- (c) Outline the classification of freshwater phytoplankton. (5 marks)
- (d) Distinguish between the different groups of zooplankton. (5 marks)
- (e) Briefly discuss the problems associated with aquatic weeds. (5 marks)
- (f) Briefly discussed the causes and effects of eutrophication in inland waters. (5 marks)

SECTION B – ANSWER ANY TWO QUESTIONS IN THIS SECTION

QUESTION TWO (20 MARKS)

Discuss the methods of measuring primary productivity in aquatic ecosystems.

QUESTION THREE (20 MARKS)

Discuss drift phenomena of macroinvertebrates in lotic ecosystems.

QUESTION FOUR (20 MARKS)

Discuss the classification of lakes based on the mixing cycles of their water.